



CHOLINESTERASE (ChE) TEST REQUEST FORM

For instructions on collection and shipping of specimens, see next page. Send specimen and completed form to:

WASHINGTON STATE DEPARTMENT OF HEALTH

PUBLIC HEALTH LABORATORIES

1610 NE 150th St., Shoreline, WA 98155-9701

(206) 418-5501

Please print clearly. Missing information may delay test order processing.

NOTE: Upon receipt of specimen, lab will assume that clinician has completed informed consent process with farm worker.

A. FARM WORKER NAME: Last _____ First: _____ Middle: _____ B. DATE OF BIRTH (mm/dd/yyyy): ____/____/____ C. GENDER: <input type="checkbox"/> Male <input type="checkbox"/> Female D. ETHNICITY: <input type="checkbox"/> Latino/Hispanic <input type="checkbox"/> Not Latino/Hispanic	I. EMPLOYER: Company _____ Contact: Last _____ First _____ Tel: (_____) _____ - _____ ext. _____ J. EMPLOYER ADDRESS: Street / P.O. Box _____ City _____ State: _____ Zip: _____
E. MOTHER'S MAIDEN NAME: Last _____ First _____	K. MONITORING STAGE: Baseline Test <input type="checkbox"/> Exposure-free in the prior 30 days <input type="checkbox"/> Not exposure-free in the prior 30 days " <i>working baseline</i> " Follow-Up/Periodic Test <input type="checkbox"/> Follow Up/ Periodic (<i>Cholinesterase Monitoring Handling Hours Report Form must be attached</i>)
F. CLINICIAN ORDERING TEST: Last: _____ First: _____ G. PHONE AND FAX NUMBERS FOR RECEIVING RESULTS: Tel: (_____) _____ - _____ ext. _____ AND Fax: (_____) _____ - _____ ext. _____ H. CLINIC INFORMATION: Name _____ Street / P.O. Box: _____ City: _____ State: WA Zip: _____ Tel: (_____) _____ - _____ Ext. _____	INFORMATION ABOUT SPECIMEN DRAW (to be completed at time of draw): L. DATE/ TIME SPECIMEN DRAWN: Date ____/____/____ Time: ____ : ____ am / pm (circle one) M. PHLEBOTOMIST NAME: Last _____ First _____

FOR LABORATORY USE ONLY - Do not write below this line

LAB ACCESSION NUMBER:	DATE RECEIVED:	METHOD: Ellman Method/ Auto Analyzer / Roche Reagent	REPORT DATE:
RBC ChE: _____ $\mu\text{Mol/min/gHb}$ SUPERVISOR: _____ RBC Reference Range: 8.5 – 16.0 $\mu\text{Mol/min/gHb}$ DATE ANALYZED: ____/____/____ TIME ANALYZED: ____ : ____ am / pm ANALYST: _____ Serum ChE: _____ $\mu\text{Mol/min/mL}$ Serum Reference Range: 3.0 – 6.5 $\mu\text{Mol/min/mL}$ DATE ANALYZED: ____/____/____ TIME ANALYZED: ____ : ____ am / pm ANALYST: _____		NOTES: Temperature when received at lab: ____ ° C	

CHOLINESTERASE (ChE) TEST REQUEST FORM**Instructions for Collecting and Shipping Whole Blood and Serum Specimens****COLLECTION**

1. Blood should be collected only by trained personnel using aseptic methods and working under the direction of a qualified, licensed practitioner.
2. **Use only plastic vacutainer tubes to avoid breakage.** Please contact the WA DOH Public Health Laboratories (PHL) at (206) 418-5494 if you do not have recommended tubes at your facility.
3. For each patient:
 - Collect 5 ml of whole blood into EDTA tube (Lavender top, # BD-367-863).
 - Collect an additional 5 or 7 ml of whole blood into Red top or Red/Gray "Tiger Stripe" tube (#BD-367-986).
 - Use 21 gauge needle to minimize mechanical damage of red blood cells (RBC).
 - If patient is sent to the Phlebotomist directly from the area of pesticide application, thoroughly swab the area of venipuncture to preclude contamination of the blood specimen with possible skin-surface pesticide.
 - Label each tube with the patient's full name.
 - Fill out the Cholinesterase (ChE) Test Request Form with as much patient information as possible. Correct and complete specimen identification is essential for data integrity. **For follow up/periodic testing, attach Cholinesterase Monitoring Handling Hours Report Form to test request form.**
4. The blood collected in Red Top or Tiger Stripe tube is used for preparation of serum specimen. It is important for the integrity of ChE results to separate serum from red blood cells as soon as possible after blood collection to minimize hemolysis of red blood cells. If your clinic has a centrifuge to spin down blood, you can use either the Red Top or Tiger Stripe tube for blood collection. Make sure that blood is properly clotted (wait 15-30 minutes if needed), then spin it down at 3,000 RPM for 10 minutes and draw serum off into a plastic or plastic coated glass tube for shipment. If your clinic does **not** have a centrifuge, you should use **only** the Tiger Stripe tube for collecting blood for serum specimen. This tube contains a clot separator assembly that minimizes hemolysis during the specimen transportation.
5. Gently rock the EDTA (Lavender top) tube for about 45 seconds to fully mix the whole blood and EDTA.
6. Prepared whole blood specimen (Lavender top tube) and serum specimen must be refrigerated at 1° C to 4° C until they are cold-packed for shipping to PHL.

NOTE: Specimens are to be collected on Sundays through Thursdays. DO NOT collect specimens on Fridays or Saturdays. The laboratory will not be performing cholinesterase testing on Saturdays or Sundays.

SHIPPING

1. **Specimens must be tested within 48 hours after the time of collection in order to maintain analytical integrity for this assay. Therefore, specimens must be shipped and received by PHL within 24 hours of collection.**
2. Pack properly identified serum and whole blood samples with enough ice gel packing to keep specimens at 1° C to 8° C (34 – 46° F) for 24 hours. Use Diagnostic Shipping System package provided by Thermal Isolating Systems (ThermoSafe) to ship 8-16 tubes. This package consists of a mailer for shipping 8 tubes, an insulated container, with inside dimensions of 11" x 8" x 8", and one or two pound gel packs. This system should keep specimens of blood within the desired temperature of 1° C to 8° C for 24 hours.
3. Place a tube filled with water into the package so the temperature inside a shipping package can be measured upon arrival at PHL.
4. Secure specimens tightly in the mailer to avoid unnecessary motion of the tubes since hemolysis in transit is problematic for the cholinesterase procedure.
5. Ship specimens with courier or mail carrier with guaranteed NEXT DAY delivery to: **WA DOH Public Health Laboratory, 1610 N.E. 150th Street, Shoreline, WA 98155-9701, attention Harold Ruark or Karin Kerr.**

CRITERIA FOR SPECIMEN REJECTION

1. Specimen tube is glass, is different size than specified, or is broken or leaking.
2. Specimen is not delivered to PHL within 24 - 36 hours from time of collection.
3. Specimen arrives at PHL at temperature higher than 10° C.
4. Specimen is hemolyzed.
5. Minimum patient identification not provided.

For questions about ChE specimen collection and shipment, call **Harold Ruark (206) 418-5501** or **Marina Silverstone (206) 418-5494**.